ZAIGALLER, V.A. (Leningrad); OSTROVSKIY, A.I. (Moscow); NOVIKOVA, V.S. (Orekhovo-Zuyevo); ZHAROV, V.A. (Yaroslavl'); SVOBODA, A. (Chekhoslovakiya); DYNKIN, Ye.B. (Moscow); BALASH, E.E. (Moscow)

Problems of elemetary mathematics. Mat. pros. no.1:219-224 '57. (MIRA 11:7)

(Mathematics--Problems, exercises, etc.)

ZALGALLER, V.A. (Leningrad)

Substituting the root of one series into another series. Mat. pros. no.2:181-185 '57. (MIRA 11:7)
(Series)

43-7-6/18

AUTHOR: ZALGALLER, V.A.

TITLE: On a Method for the Introduction of the Measure (Ob odnom sposobe vvedeniya mery)

PERIODICAL: Vestnik Leningradskogo Universiteta, Seriya Matematiki, Mekhaniki i Astronomii, 1958, Nr 7 (2), pp 49-51 (USSR)

ABSTRACT: The author has the effort to collect in a uniform scheme the different methods used by A.D.Aleksandrov for definitions of the curvature and the area. Therefore he proposes the following definition of measure. Let t_i denote a closed connected set. Let S be a system of the t_i in the metric space R. For $t_1, t_2 \in S$ let the definition $t_1 \overline{\cap} t_2$ ("non-overlapping") be defined, where a) from $t_i \overline{\cap} t_j$ there follows $t_j \overline{\cap} t_i$, b) from $t_i \cap t_j = 0$ there follows $t_i \overline{\cap} t_j$, c) from $t_i \overline{\cap} t_j$ and $t_k \subset t_j$ there follows $t_i \overline{\cap} t_k$. On the sets $t \in S$ let be defined a function $\varphi(t)$, $\varphi(0) = 0$, $\varphi(t) \geqslant 0$. Let $\{P\}$ be a system of sets, where every set admits at least one representation as a finite sum of pairwise "non-overlapping" $t_i \in S$. Let T_p be a certain representation of this kind. Let $d(T_p)$ be the greatest diameter of the $t_i \in T_p$. Then let

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On a Method for the Introduction of the Measure 43-7-6/18

$\mu_0(P) = \overline{\lim}_{d(T_p)\to 0} \sum_{t_j \in T_p} \varphi(t_i)$ and $\mu_0(P) = 0$ if there does not exist a T_p with an arbitrarily small $d(T_p)$. For an open set G let $\mu_1(G) = \sup_{P \subset G} \mu_0(P)$ and for arbitrary M: $\mu(M) = \inf_{G \subset M} \mu_1(G)$.

The author gives conditions under which $\mu(M)$ is the measure of Caratheodory, the exterior measure of Lebesgue, the variation of a curve (in the sense of Aleksandrov), the area of M and the positive part of the curvature $\omega^+(M)$.
5 Soviet references are quoted.

SUBMITTED: February 25, 1957
AVAILABLE: Library of Congress
Card 2/2

1. Measurement-Theory 2. Mathematical analysis

16(1)

AUTHOR: Zalgaller, V.A.

SOV/43-58-19-7/16

TITLE: The Attraction of Round Plates ; The Irradiation of a Round Target by a Round Source (Prityazheniye kruglykh plastin ; obliucheniye krugloy misheni kruglym istochnikom)

PERIODICAL: Vestnik Leningradskogo universiteta,Seriya matematiki, mekhaniki i astronomii,1958, Nr 19(4),pp 58 - 75 (USSR)

ABSTRACT: The paper contains numerous applications of the method of Hammersley [Ref 1] (reduction of the multiplicity of a multiple integral) to several problems of applied sciences. The results are partly already known, partly rather obvious.

There are 13 figures, and 10 references, 4 of which are Soviet, 3 English, 1 German, 1 American, and 1 French.

SUBMITTED: April 16, 1957

Card 1/1

AUTHOR: Zalgaller, V.A. SOV/20-123-4-5/53

TITLE: Isometric Imbedding of Polyhedra (Izometricheskoye vlozheniye poliedrov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 4, pp 599-601 (USSR)

ABSTRACT: The following theorem is proved:
Let $n = 1,2,3$ or 4. Let the polyhedron P^n consist of simplexes of the space R^n of constant curvature. Every P^n can be imbedded isometrically into the R^n if self-intersections and overlappings are admitted.
The proof is constructive and is given by the author for $n = 1,2,3$. The proof for $n = 4$ is not given because it is too complicated. A proof for $n > 4$ could not be obtained.

ASSOCIATION: Leningradskoye otdeleniye matematicheskogo instituta imeni V.A.Steklova Akademii nauk SSSR (Leningrad Section of the Mathematical Institute imeni V.A.Steklov, AS USSR)

PRESENTED: July 7, 1958, by V.I.Smirnov, Academician
SUBMITTED: July 2, 1958

Card 1/1

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S/043/60/000/02/05/011

AUTHORS: Burago, Yu.D., and Zalgaller, V.A.

TITLE: Polyhedral Imbedding of a Net

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki, mekhaniki i astronomii, 1960, No.2, pp 66-80

TEXT: Given a complex of plane triangles homeomorphic to a closed region on an orientable two-dimensional surface. Then in the E^3 there exists a polyhedron without a self-intersection which is isometric to this complex. The author mentions A.D.Aleksandrov. There are 9 figures and 5 references: 2 Soviet, 1 English and 2 American.

Card 1/1

AKILOV, G.P.; VULIKH, B.Z.; GAVURIN, M.K.; ZALGALLER, V.A.; NATANSON, I.P.; PINSKER, A.G.; FADDEYEV, D.K.

Leonid Vital'evich Kantorovich; on his 50th birthday. Usp. mat.nauk 17 no.4:201-215 '62. (MIRA 15:8)
(Kantorovich, Leonid Vital'evich, 1912-)

ZALGALLER, V.A.

Curved on a surface near a point type dot. Trudy Mat. inst.
76:64-66 '65. (MIRA 18:6)

BURAGO, Yu.D.; ZALGALLER, V.A.

An isoperimetric problem involving an area of bounded width on a surface. Trudy Mat. inst. 76:81-87 '65. (MIRA 18:6)

ZAIGALLER, V.A.

Regular-faced polyhedra. Vest. LGU 20 no.1:150-152 '65.
(MIRA 18:2)

BELYAYEVA, T.B.; ZALGALLER, V.A.

Formulation of the theory of envelopes; a methodological note.
Usp. mat. nauk 18 no.5:137-149 S-O '63. (MIRA 16:12)

ZALGALLER, V.A.

Regular polyhedra. Vest.LGU 18 no.7:5-8 '63. (MIRA 16:4)
(Polyhedra)

ZALGALLER, V. A.

Representation of a function of two variables as the difference of convex functions. Vest. LGU 18 no.1:44-45 '63. (MIRA 16:1)

(Functions of several variables)
(Programming(Electronic computers))

YEFIMOV, N.V.; ZALGALLER, V.A.; POGORELOV, A.V.

Aleksandr Danilovich Aleksandrov; on his 50th birthday. Usp. mat.nauk 17 no.6:172-184 N-D '62. (MIRA 16:1)
(Aleksandrov, Aleksandr Danilovich, 1912-)

ALEKSANDROV, Aleksandr Danilovich; ZALGALLER, Viktor Abramovich; PETROVSKIY, I.G., akademik, otv.red.; NIKOL'SKIY, S.M., prof., zamestitel'-otv.red.; BARKOVSKIY, I.V., red.izd-va; ZENDEL', M.Ye., tekhn.red.

[Two-dimensional manifolds of bonded curavture; fundamentals of the internal geometry of surfaces] Dvymernye mnogoobraziia ogranichennoi krivizny; osnovy vnutezrnnei geometrii poverkhnostei. Moskva, Izd-vo Akad. nauk SSSR, 1962. 262 p. (Akademiia nauk SSSR. Matematicheskii institut. Trudy, vol. 63). (MIRA 16:2)

(Surfaces) (Curves)

ZAIGALLER, V.A.

Possible characteristics of smooth surfaces. Vest.LGU 17 no.7:71-77 '62. (MIRA 15:5)

(Surfaces)

ZALGALLER, V.A. (Leningrad)

How to get out of the wood? One of Bellman's problems. Mat.pros. no.6:191-195 '61. (MIRA 15:3)

(Programming(Mathematics))

ZAIGALLER, V.A. (Leningrad); RUDENKO, N. (Moskva); DAVYDOV, U. (Gomel'); RABINOVICH, V. (Petropavlovsk-Kazakhstanskiy); BESKIN, L.N. (Moskva); TAMATAR, I.Ya. (Moskva); SKOPETS, Z.A. (Yaroslavl'); DUBNOV, Ya.S. (Moskva); GEL'FOND, A.O. (Moskva); ROBINSON, R.M. (SShA); BALK, M.B. (Smolensk); SHUB-SIZONENKO, Yu.A. (Moskva)

Solutions to the problems. Mat. pros. no.5:261-274 '60.
(MIRA 13:12)
(Mathematics—Problems, exercises, etc.)

ZALGALLER, V.A. (Leningrad)

Comments on the Radó problem. Mat. pros. no.5:141-148 '60.
(MIRA 13:12)

(Functions of real variables)

ZALGAUTSKAYA, I.K.

USSR/Cultivated Plants - Technical, Oil, and Sugar Plants. M-4

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10916

Author : Zalgautskaya, I.K.
Inst :
Title : An Experiment in the Square-Nest Distribution of Plants.

Orig Pub : Sakharnaya svekla, 1957, No 4, 5-8

Abstract : Experiments conducted in 1948-1953 on the Mezhotnens Testing and Selecting Stations (Latvian SSR) have demonstrated that under Latvian conditions a distance of 44.5 cm. between rows gives no better yields or higher sugar content than a distance of 60 cm. The 60 cm. distance reduces labor input in the gaps by 25% and creates the best conditions for mechanical cultivation "sharovka" and plowing between the rows. When the square nest method was used (60 x 60 cm.) and two plants were left 7-8 cm. apart in the nest, the yield was 450-500 centners per hectare.

Card 1/1

ZALIBEKOV, Z.G.

Identification of brown soils in the Aktash Piedmont Plain of Daghestan. Pochvovedenie no.10:33-41 O '65. (MIRA 18:11)

1. Dagestanskiy gosudarstvennyy universitet.

VYDRA, A.Ya.; ZALICHENKO, Z.Ya.; DERBAREMDIKER, P.Z.

Effect of the concentration of the sizing solutions and additives on the viscosity of the product. Leh.prom. no.1: 66-70 Ja-Mr '62. (MIRA 15:9)

1. Darnitskiy shelkovyy kombinat. (Sizing)

ZALICHEV, N., inzh.; ROVNER, L., inzh.

Use of punched cards in the operative calculations of ship repair. Mor. flot. 24 no.11:33-34 N '64. (MIRA 18:8)

ZALICHENOK, Gavriil Grigor'yevich, kand. tekhn. nauk, laureat Gos. premii; SHCHEDROVITSKIY, S.S., kand. tekhn. nauk, nauchn. red.; KUPERSHMIDT, L.S., red.

[Automating enterprises of the construction industry] Avtomatizatsiia predpriiatii stroitel'noi industrii. Moskva, Vysshaia shkola, 1965. 419 p. diagr. (MIRA 18:12)

ZALICHONOK, Nikolay Anisimovich[Zalichonak, N.A.], ekskavatorshchik; MISHANAVA, Yo.A., red.; UCHUKHLEBAU, A.A., tekhn. red.

[Full load for excavators]Ekskavataram - pounuiu nahruzku. Minsk, Dziarzh. vyd-va sel'skohaspadarchai litry BSSR, 1962. 29 p. (MIRA 15:11)

1. Rudakovskoye Belorusskoye meliratsionnoye upravleniye, Gomel'skoy oblasti (for Zalichonok).
(White Russia—Drainage)

POLAND

ZALICHTA, Stefania and BLASZYNSKA, Maria; Department of Medical Microbiology at Medical Academy (Zakład Mikrobiologii Lekarskiej AM) Head (Kierownik) Prof Dr J. PARNAS, Lublin.

"Physiological Changes in Streptococci Maintained on Blood Agar Media."

Warsaw, Medycyna Doswiadczalna i Mikrobiologia, Vol 18, No 1, 1966; pp 15-21.

Abstract [English summary modified]: Study of persistence of strain-specific properties in 155 streptococcal strains: alpha and beta-hemolytic activities tended to decrease but there was no complete loss or acquisition de novo of either after about 6 years' cultures. Some strains became more similar to enterococci as regards optimal growth media following 2 years in sheep blood agar. Two tables, 3 Polish and 11 Western references.

1/1

L 25133-66 T -JK

ACC NR: AP6016400 (A) SOURCE CODE: GE/0038/65/019/004/1095/1102

AUTHOR: Parnas, Josef (Professor; Doctor; Director; Lublin); Zalichta, Stefania (Doctor; Lublin); Tuszkiewicz, Maria (Doctor; Lublin)

ORG: Institute of Medical Microbiology and Epidemiology, /directed by Prof., Dr. J. Parnas/, Polish Academy of Medicine, Lublin

TITLE: Phenomenon of brucella phage adsorption through chemical brucella substrates

SOURCE: Archiv fur experimentelle Veterinarmedizin, v. 19, no. 4, 1965, 1095-1102

TOPIC TAGS: bacteriophage, virology, bacteriology

ABSTRACT: Acetone substrates of three brucella species (Br. bovis, suis, melitensis) can exert specific inhibition on brucella phage activity. Acetone substrates of other bacterial species do not exert this inhibition. The specificity of this effect was confirmed by experiments with staphylococcus phages which were not inhibited by brucella substrates. The greatest inhibition was exerted by the substrate of Br suis, the least by Br. melitensis. Inhibition was proportional to the dilution. It is considered probable that Br. melitensis strains contain an antigen substance in their cell wall which serves as receptor of the brucella phages. In the majority of the members this may be localized in the interest of the cells, and yet be potentially present. It seems possible that the dehydration of the cells with acetone and the drying process effects a shifting of these receptors closer to the cell wall. A differentiation of Br. species is not possible by means of this inhibition test since all three inhibit the Br. phage activity. Orig. art. has: 3 figures and 5 tables. [Based on authors' abst.] [JPRS]

SUB CODE: 06 / SUBM DATE: 21Dec64

Card 1/1 UDC

ZAGRODZKI, Stanislaw; WALERIANCZYK, Edmund; ZALICKI, Jerzy

Delimining of sugar solutions by cation-exchanger in the natrium and ammonium cycle. Rocz Tech chem zywn 8:5-18 '61.

1. Katedra Cukrownictwa i Technologii Srodkow Spozywczych, Politechnika, Lodz. Kierownik Katedry: prof dr. S.Zagrodzki.

ZAGRODZKI, Stanislaw (Lodz); KUBIAK, Jan (Lodz); ZALICKI, Jerzy (Lodz)

Production of lactic acid from potato syrup. Przem spoz 15 no.9: 26-33 '61.

ZALICHENKO, L.G.

Pulse Techniques (55036881)

TK7835.M4 1954

1. Pulse techniques (Electronics) I. Zalichenko, L. G.

PARNAS,J.; ZALICHTA, S.

Further data on the characteristics of Brucella phages: inactivation by antigenic acetone substrates of Brucella. Bull. acad. Pol. sci. (Biol) 13 no.3:145-150 '65.

1. Submitted December 9, 1964.

ZALIGIN, O.G. [Zalyhin, O.H.], inzh.-mekhanik

Preparing granulated organomineral fertilizers. Mekh. sil'. hosp. 12 no. 3:10-12 Mr '61. (MIRA 14:4)
(Fertilizers and manures)

ZALIGYAN, G.G., lyubitel'-sadovod

An effective means. Zashch. rast. ot vred. i bol. 9 no.9:38 '64.
(MIRA 17:11)

ZALIKBEKOV, Z. G.

Several problems in the soil zonality of the Aktash piedmont plain in Daghestan. Izv. Vses. geog. ob-va 96 no. 2:139-140 Mr-Ap '64. (MIRA 17:5)

STREPIKHEYEV, Yu.A.; ZALIKIN, A.A.; CHIMISHKYAN, A.L.

Determination of primary, secondary, and tertiary amino groups in polynuclear polyamines. Zhur.anal.khim. 18 no.10:1262-1265 O '63. (MIRA 16:12)

1. Mendeleev Moscow Chemico-Technological Institute.

ZALIKIN, A.A.; KOCHETKOV, V.L.; STREPIKHEYEV, Yu.A.

Some physical and physicochemical constants of m- and p-chloraniline and m- and p-chlorophenylisocyanates. Khim. prom. 41 no.5:338 My '65. (MIRA 18:6)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

L 37218-66 EWP(j)/EWT(m)/T/EWP(v) IJP(c) RM/WW/JWD

ACC NR: AP6018128 (A) SOURCE CODE: UR/0191/66/000/006/0046/0048

AUTHOR: Zalikin, A. A.; Davydov, A. B.; Strepikheyev, Yu. A.; Ivanova, Z.G.

42-
41
B

ORG: none

TITLE: Use of polycyclic polyisocyanates as components in cold curing adhesive compositions

SOURCE: Plasticheskiye massy, no. 6, 1966, 46-48

TOPIC TAGS: isocyanate resin, polyester plastic, adhesive, adhesion, heat resistance

ABSTRACT: The possibility of using polycyclic polyisocyanates (A) in adhesives that will cure without heat to attain improved heat stability was investigated. A, made of aniline, o-toluidine, or o-chloroaniline with formaldehyde, were used as 50% acetone or toluylene diisocyanate solutions. To prepare the adhesive various polyesters were added, also as 50% acetone solutions or as powders. The components were mixed, catalyzed with a 5% aqueous potassium methacrylate solution, mixed again and spread onto steel or duralumin surfaces 30-40 minutes later. Bond strength and heat stability depended on the composition of the polyisocyanate, increasing with increase in its molecular weight and

Card 1/2 UDC: 678.664.668.395.6

L 37218-66

ACC NR: AP6018128

number of NCO- groups. Physical mechanical properties of the adhesive and its bond strength at room temperature and at 150-200°C also improved with increase in curing time. With cementing temperatures of 60-120°C the same bond strength was attained in 2 hours as when curing at room temperature for 10 hours. Bond strength also depended on surface preparation--best adhesion was obtained with freshly sandblasted surfaces. Orig. art. has: 6 tables.

SUB CODE: 07,11/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 009

Card 2/2

ACC NR: AP6009027 (A) SOURCE CODE: UR/0064/65/000/011/0017/0020

AUTHOR: Zalikin, A. A.; Strepikheyev, Yu. A.

ORG: none

TITLE: Synthesis and properties of the polynuclear polyisocyanates

SOURCE: Khimicheskaya promyshlennost', no. 11, 1965, 17-20

TOPIC TAGS: polymer, synthetic material, polyamine compound, isocyanate resin, polyurethane, IR spectrum

ABSTRACT: Several polynuclear polyisocyanates with molecular weights of 280-500, 21.6-33.6% NCO-groups, and 1.3-11.2% hydrolyzable chlorine were synthesized via a two-stage phosgenation of various mixtures of polymethylenepolyphenylenepolyamines in chlorobenzene. The temperature in the first stage was 100°C and its duration was 75 min. The temperature in the second stage was 120°C and its duration was 75 min. The yields of the polynuclear polyisocyanates were within the 92-97% range. The starting polyamines, with 158-400 molecular weight and 6.9-14.8% NH_2-group content, were synthesized from aniline, ortho- and paratoluidine, o-chloroaniline, formaldehyde, benzaldehyde, and acetaldehyde. It was found that the molecular weight and the chlorine content in polyisocyanates depended upon the molecular weight and the structure of the starting polyamines. The presence of such groups as COCl, C=O, and C-Cl in the poly-

Card 1/2 UDC: 678.661.01

ACC NR: AP6009027

isocyanate products were determined by the IR technique. Orig. art. has: 4 figures, 4 tables.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 004

Card 2/2

ZALIKIN, G. A.

Volga-Don Canal

Sanitary services at the construction of the Volga-Don Canal. Sov. med. 16 No. 7, 1952

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

ZALIKIN, G.A.

First All-Union Conference on problems of school hygiene. Gig.i san. no.9: 55-57 S '53. (MLRA 6:8)

(School hygiene)

ZALIKIN, G.A., vrach.

Charts on hygiene ("Visual aids for teaching human anatomy and physiology in the 6th class of the secondary school." O.V.Flerov. Reviewed by G.A.Zalikin). Est.v shkole no.5:94-96 S-O '54. (MLRA 7:9)

1. Ministerstvo zdravookhraneniya SSSR.
(Flerov, O.V.) (Hygiene--Study and teaching)

ZALIKIN, G.A.

ZALIKIN, G.A.

"Research methods used in sanitation and public health." V.M. Aleksandrov. Reviewed by G.A.Zalikin. Gig. i san. no.6:58-61 Ja '54. (MLRA 7:6)

(SANITATION RESEARCH)
(PUBLIC HEALTH RESEARCH)

ZALIKIN, G.; YEGOROVA, O. (Moskva)

For a wider involvement of the people in the campaign for a healthy life. Fel'd. i akush. 25 no.4:18-21 Ap '60. (MIRA 14:5)
(TULA PROVINCE--PUBLIC HEALTH)

ZALIKIN, G.A.

In the Collegium of the Ministry of Public Health of the R.S.F.S.R.
Zdrav. Ros. Feder. 4 no.5 44-45 My '60. (MIRA 13:11)
(PUBLIC HEALTH)

ZALIKMAN, T.I.

Hardening parts by spraying. Mashinostroitel' no.6:38-39 Je '63. (MIRA 16:7)

(Metal spraying) (Plastic spraying)

L 07450-67 EWT(m)/EWP(j) RM

ACC NR: AP6035833 SOURCE CODE: UR/0413/66/000/020/0037/0037

INVENTOR: Raver, Kh. R.; Zalikina, L. M.; Bruker, A. B.; Soborovskiy, L. Z. 27

ORG: none B

TITLE: Preparative method for phenyl-1,1,2,2-tetrafluoroethylphosphinotributoxytitanium. Class 12, No. 187020 15

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 37

TOPIC TAGS: organic phosphorus compound, organotitanium compound, chemical synthesis

ABSTRACT: An Author Certificate has been issued for a method of preparing phenyl-1,1,2,2-tetrafluoroethylphosphinotributoxytitanium. The method involves the reaction of sodium phenyl-1,1,2,2-tetrafluoroethylphosphide with tributoxychlorotitanium at 40C in an organic solvent (e.g., toluene). 7

SUB CODE: 07/ SUBM DATE: 18Oct65/ ATD PRESS: 5104

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S/080/61/034/008/012/018
D204/D305

11800

AUTHORS: Tomashov, N.D. and Zalikov, F.P.

TITLE: The influence of the structure of thick anodically oxidized films on their properties

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 8, 1961, 1799-1807

TEXT: The investigation covered the dependence of certain properties of anodically oxidized films, produced by the hard anodizing method as developed by the Institut fizicheskoy khimii (Institute of Physical Chemistry) AS USSR, on their structure. Specimens of 99.99% pure aluminum, as well as of a number of binary aluminum alloys, specially cast and heat treated by homogenization and subsequent water quenching, were used. Duralumin D16ABTV (3.8 - 4.9% Cu, 1.2 - 1.8% Mg, 0.3 - 0.9% Mn, 0.5% Si, 0.5% Fe, remainder Al) was also studied. Anodic oxidation was carried out in a 4 N H_2SO_4 solution at a temperature of -2° and anode current densities of 2.5, 5 and 10 A/dm^2. The formation voltage corresponding to these curr-

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The influence of the structure...

ent densities was 22 - 27 V for aluminum and 25 - 35 V for aluminum alloys (the formation voltage is the voltage across the cathode and the anode of the bath at the time when the porous part of the film above the barrier layer begins to grow). Comparison between the structure of the anodic film forming in the normal anodizing process (CD_a = 1 A/dm^2, formation voltage = 10 V, t = 20°) was also made. Dissipation of the intense heat emitted during anodizing was carried out by means of internal cooling, in which heat was conducted away by supplementary cooling of the anodized component, or else by means of circulation of the electrolyte itself. In individual cases, simple mechanical stirring of the electrolyte was sufficient. The total porosity of the anodic films was determined by saturating the films with mineral oil at 95°. Hardness measurements were carried out by means of a PMT-3 machine, using a load of 20 g on the diamond pyramid. The wear resistance of the anodic coatings was studied with a Shkoda-Savina machine fitted with a revolving disc made of the superhard "Vidia" alloy, in a jet of 0.5% K_2CrO_4 solution. The microstructure of the anodically oxidized films was examined through

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The influence of the structure...

EM-3 and EUM-100 electron microscopes. Negatives of 8 - 12 x 10^3 magnifications were obtained. The metallurgical microscope MIM-6 was used for the macrostructure. The following relationships were studied: porosity (volume %) against current density; microhardness and regular porosity against current density; wear and number of oxide cells and pores per 1 mm^2 against current density; and relative wear resistance against the alloy element content (Zn, Mg, Si, Cu, Mn, Fe). The dependence of the corrosion resistance properties on the depth of the thin impervious barrier layer and the structure of the porous anodic film produced under various conditions of anodizing were also noted. It was found that the structure of anodic films contains, apart from the normal micropores which constitute the regular porosity, certain macro and microcracks, as well as macrovoids, which make up the so-called irregular porosity. Relationships were revealed between hardness, frictional wear resistance and corrosion resistance of thick anodically oxidized films on the one hand and their structure on the other. It was shown that the hardness and wear resistance of anodic films produced on pure aluminum depends essentially on their regular porosity. The hardness

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The influence of the structure...

of anodic films produced on aluminum alloys with high copper content (4 - 8% Cu) depends mainly on the irregular porosity. The high wear resistance of anodic films produced on a number of heterogeneous binary aluminum alloys is due to the presence in the film of crystals of intermetallic compounds ($FeAl_3$, $MnAl_6$, $CuAl_2$), as well as crystals of Si. The lower wear resistance of anodic films produced on homogeneous alloys is due to the greater total porosity of these films. The corrosion resistance of anodic films produced on pure aluminum depends on two factors: the thickness of the barrier layer and the number of pores in the films. With an increase in current density, films form which possess higher corrosion resistance properties; this is associated with an increase in the thickness of the barrier layer and a decrease in the regular porosity. There are 9 figures, 2 tables and 11 references: 10 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: F. Keller, M. Hunter, D. Robinson, J. Electrochem. Soc., 100, 9, 411 (1953).

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of

Card 4/5

S/080/61/034/008/012/018
D204/D305

The influence of the structure...

Physical Chemistry, AS, USSR)

SUBMITTED: December 31, 1960

Card 5/5

ZALIKOVICH, E.

ZALIKOVICH, E.

Transformation of weight. Znan.sila 30 no.7:36-38 Jl '55.
(Motion) (MLRA 8:10)

ZALINSKAYA, Ye. D.

"Morphology of angiosperm fossil pollen and the development of the angiosperm flora during the Upper Cretaceous and Paleogene periods."

Report submitted for 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

AS USSR, Moscow.

ZALINSKIY, Yu.G.; KAFAROV, V.V.

Hydrodynamics and conveying system on grid plates without overflow connecting pieces. Med. prom. 17 no.6:20-28 Je '63 (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.

DANGYAN, M.T.; ZALINYAN, M.G.

Preparation of δ-exo-γ-lactones. Part 2 [in Armenian with summary in Russian] Nauch.trudy Erev.un.no.53:15-26 '56. (MLRA 9:10)

1.Kafedra organicheskoy khimii.
(Lactones)

DANGYAN,M.T.; ZALINYAN, M.G.; ARAKELYAN, S.V.

Preparation of 2-diethylaminoethyl esters of substituted γ-chlorocrotylacetic acids. Izv. AN Arm. SSR. Khim. nauki 16 no.1:43-46 '63 (MIRA 17:8)

1. Yerevanskiy gosudarstvennyy universitet, kafedra organicheskoy khimii.

ZALINYAN, M.G.; DAVTYAN, M.T.

Synthesis of unsaturated δ lactones. Preparation of 3-butyl-6-methyl-3,4-dihydr-α-pyrone. Izv. AN Arm.SSR. Khim.nauki 18 no.1:121-123 '65. (MIRA 18:5)

1. Yerevanskiy gosudarstvennyy universitet, kafedra organicheskoy khimii.

ZALINYAN, M.G.; DANGYAN, M.T.

Preparation of some alkoxymethyl- γ - chlorocrotylacetic acids. Izv. AN Arm. SSR. Khim. nauki 18 no.3:278-281 '65. (MIRA 18:11)

1. Yerevanskiy gosudarstvennyy universitet, kafedra organicheskoy khimii. Submitted May 15, 1964.

ZALINYAN, M.G.; DANGYAN, M.T.

Preparation of β-chloroacetylsuccinic acid and its derivatives. Report No.1.[in Armenian with summary in Russian]. Nauch. trudy Erev. un. 60:3-8 '57. (MIRA 11:8)

1.Kafedra organicheskoy khimii Yerevanskoge gosudarstvennoge universiteta.
(Succinic acid)

ZALINYAN, M.G.; DANGYAN, M.T.

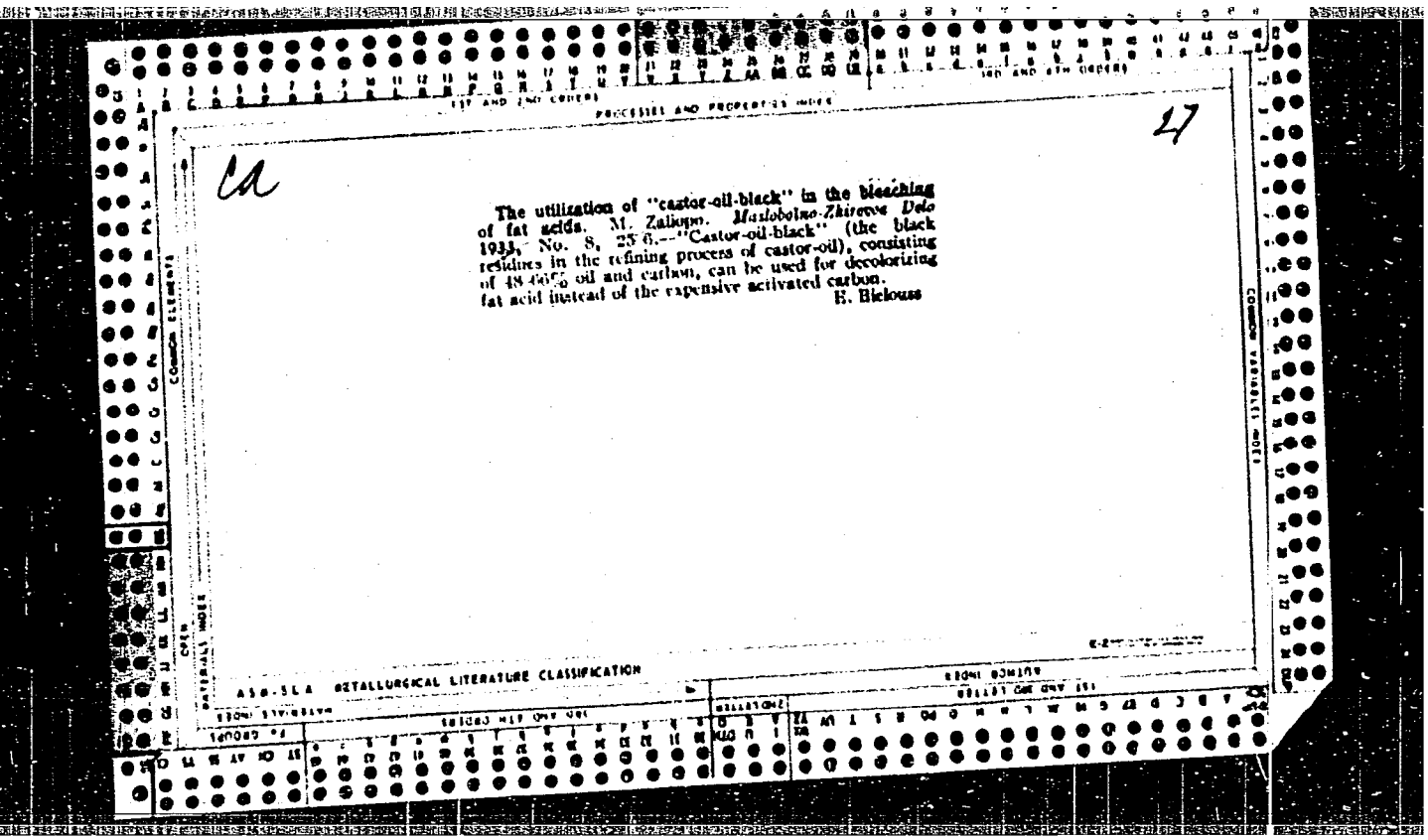
Preparation of δ-oxy- γ-lactones. Report No.3 [in Armenian with summary in Russian]. Nauch. trudy Erev. un. 60:9-16 '57.
(MIRA 11:8)

1.Kafedra organicheskoy khimii Yerevanskogo gosudarstvennogo universiteta.
(Lactones)

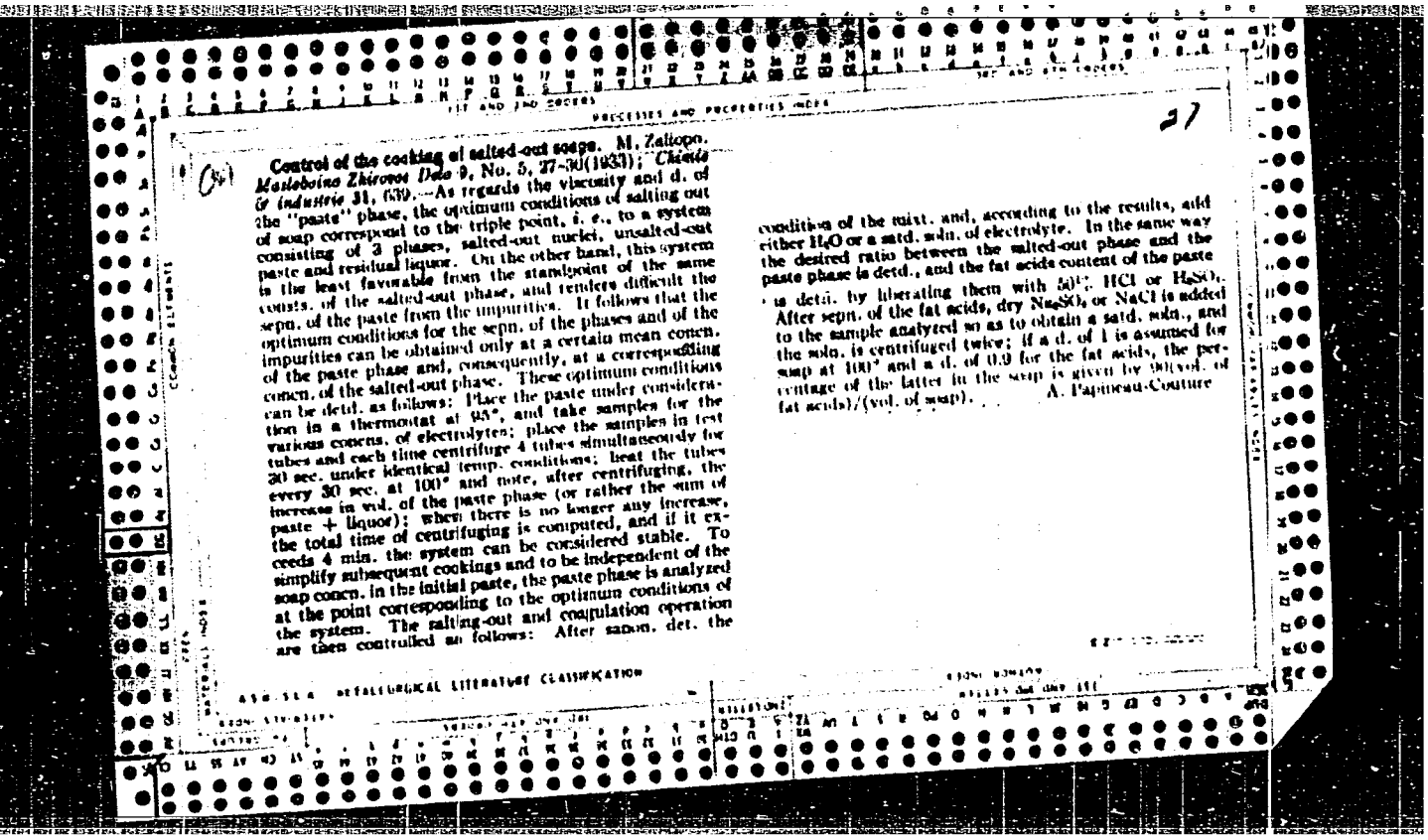
ARAKELYAN, S.V.; DANGYAN, M.T.; ZALINYAN, M.G.; SARKISYAN, S.A.

Preparation of δ-alkoxy-(aroxy-, phthalimido)-γ-lactones.
Izv.AN Arm.SSR.Khim.nauki 15 no.5:439-442 '62. (MIRA 16:2)

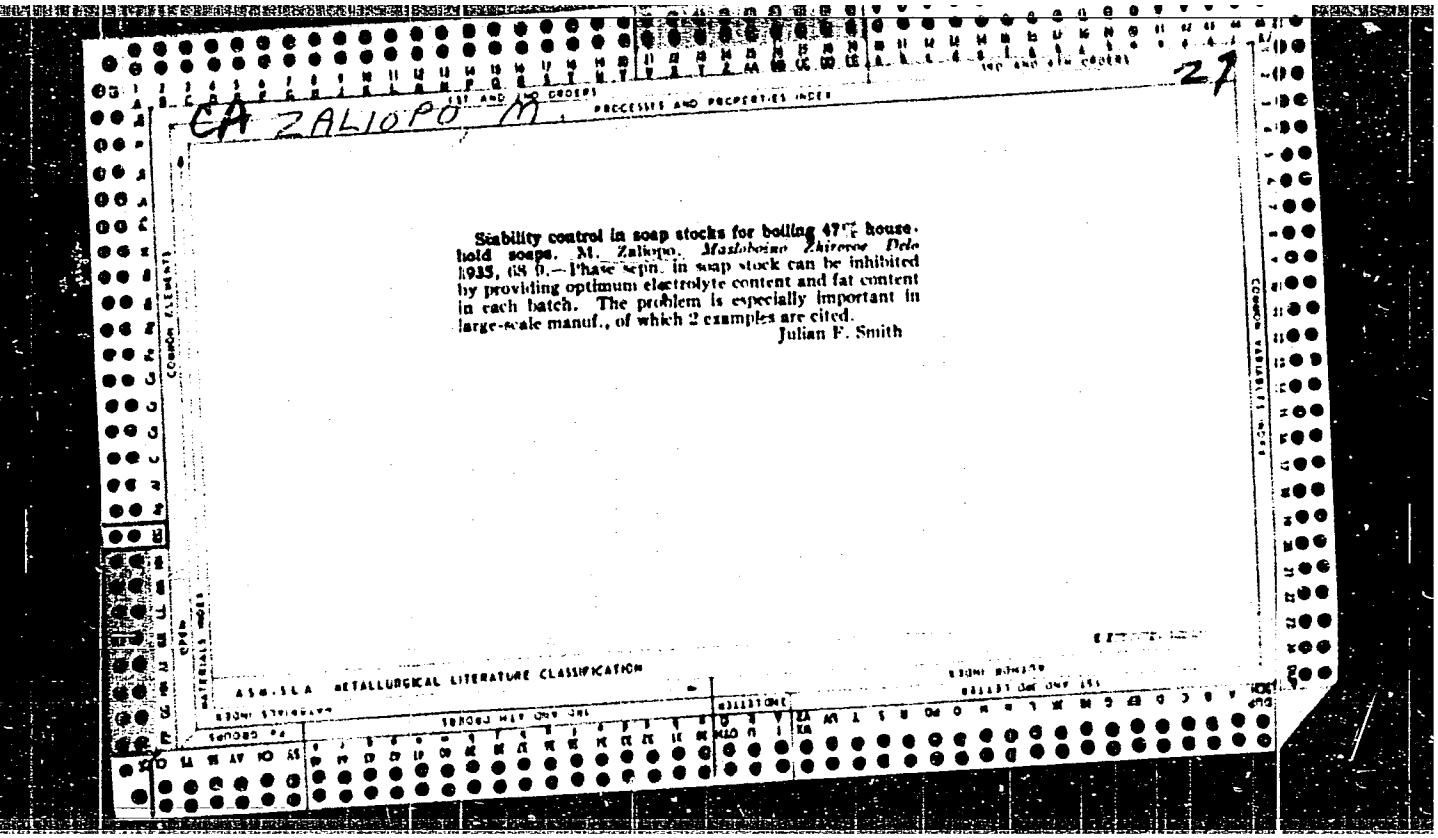
1. Yerevanskiy gosudarstvennyy universitet, kafedra organicheskoy khimii.
(Lactones)



The utilization of "castor-oil-black" in the bleaching of fat acids. M. Zaliopp. *Maslobolno-Zhirovoe Delo* 1933, No. 8, 25-6.—"Castor-oil-black" (the black residues in the refining process of castor-oil), consisting of 48.66% oil and carbon, can be used for decolorizing fat acid instead of the expensive activated carbon.
E. Bielouss



Control of the cooking of salted-out soaps. M. Zaltopo. *Maslobóino Zhirovoi Delo* 9, No. 5, 27–30(1933); *Chimie & Industrie* 31, 639.—As regards the viscosity and d. of the "paste" phase, the optimum conditions of salting out of soap correspond to the triple point, i. e., to a system consisting of 3 phases, salted-out nuclei, unsalted-out paste and residual liquor. On the other hand, this system is the least favorable from the standpoint of the same consts. of the salted-out phase, and renders difficult the sepn. of the paste from the impurities. It follows that the optimum conditions for the sepn. of the phases and of the impurities can be obtained only at a certain mean concn. of the paste phase and, consequently, at a corresponding concn. of the salted-out phase. These optimum conditions can be detd. as follows: Place the paste under consideration in a thermostat at 95°, and take samples for the various concns. of electrolytes; place the samples in test tubes and each time centrifuge 4 tubes simultaneously for 30 sec. under identical temp. conditions; heat the tubes every 30 sec. at 100° and note, after centrifuging, the increase in vol. of the paste phase (or rather the sum of paste + liquor); when there is no longer any increase, the total time of centrifuging is computed, and if it exceeds 4 min. the system can be considered stable. To simplify subsequent cookings and to be independent of the soap concn. in the initial paste, the paste phase is analyzed at the point corresponding to the optimum conditions of the system. The salting-out and coagulation operation are then controlled as follows: After saponn. det. the conditions of the mixt. and, according to the results, add either H_2O or a satd. soln. of electrolyte. In the same way the desired ratio between the salted-out phase and the paste phase is detd., and the fat acids content of the paste is detd. by liberating them with 50% HCl or H_2SO_4. After sepn. of the fat acids, dry Na_2SO_4 or NaCl is added to the sample analyzed so as to obtain a satd. soln., and the soln. is centrifuged twice; if a d. of 1 is assumed for soap at 100° and a d. of 0.9 for the fat acids, the percentage of the latter in the soap is given by 90(vol. of fat acids)/(vol. of soap). . . . A. Papineau-Couture



CA ZALIOPO, M.

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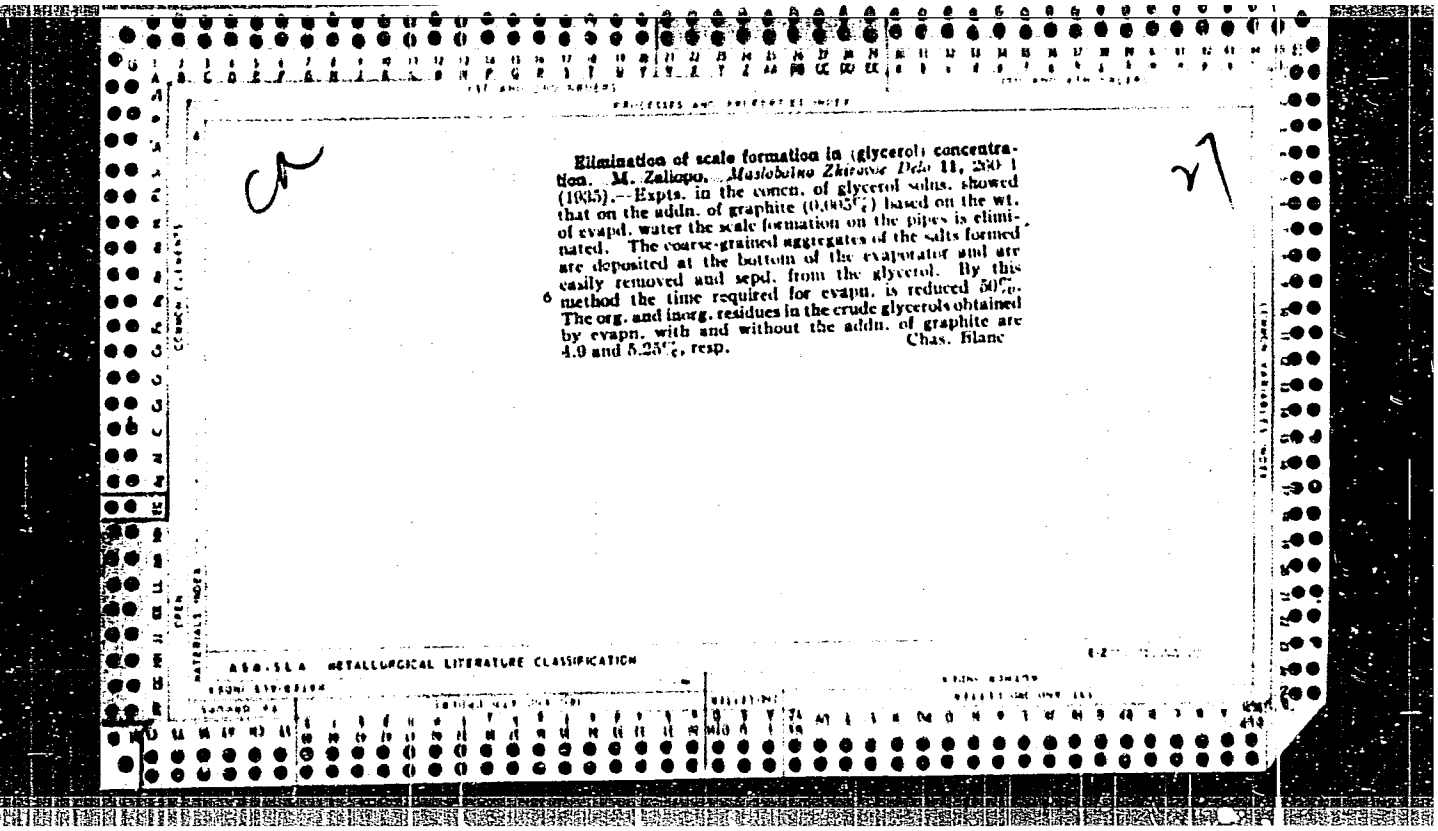
PROCESSES AND PROPERTIES INDEX

Stability control in soap stocks for boiling 47% household soaps. M. Zaliopo. *Maslobeino Zhirovoe Delo* 1935, 68 0.—Phase sepn. in soap stock can be inhibited by providing optimum electrolyte content and fat content in each batch. The problem is especially important in large-scale manuf., of which 2 examples are cited.

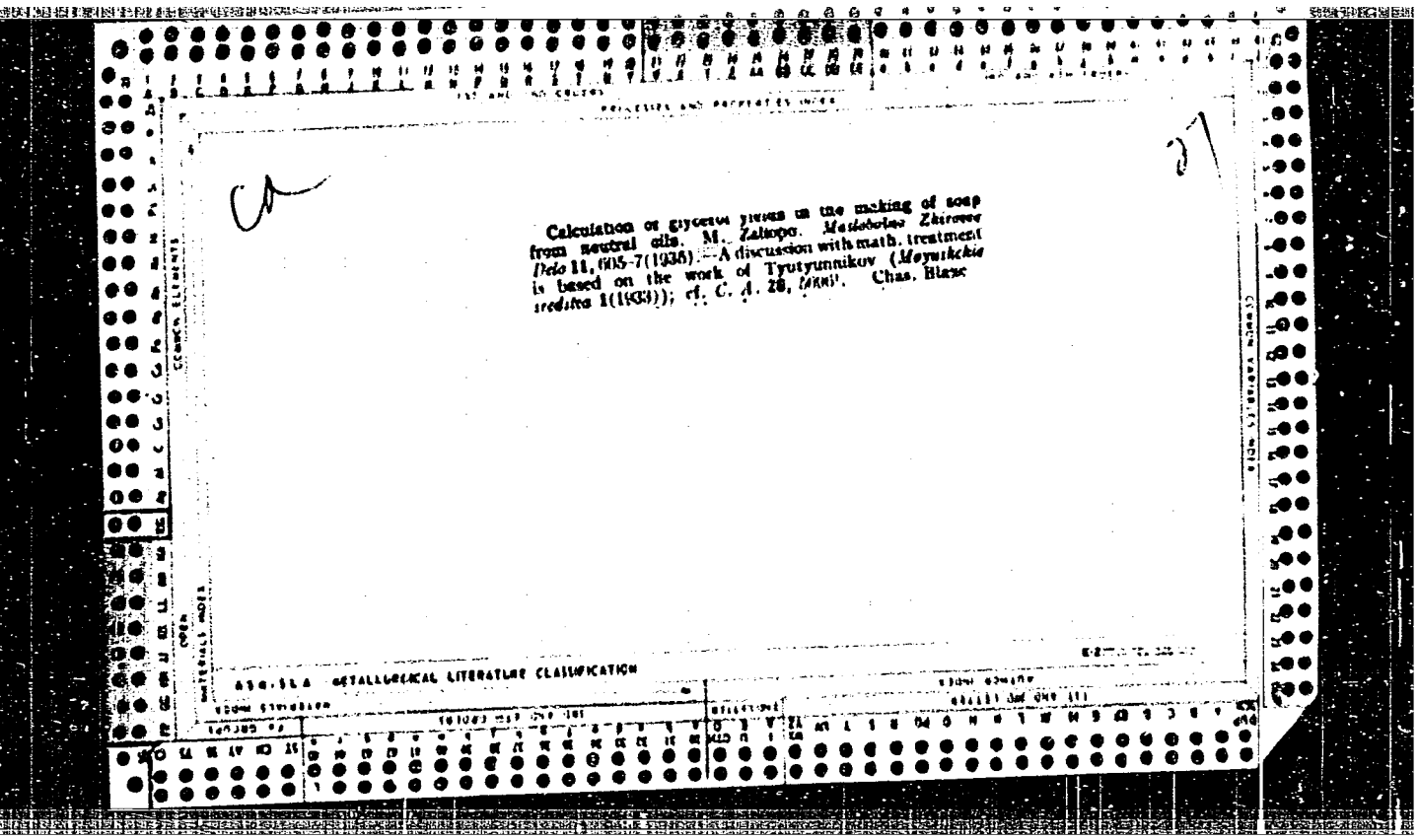
Julian F. Smith

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

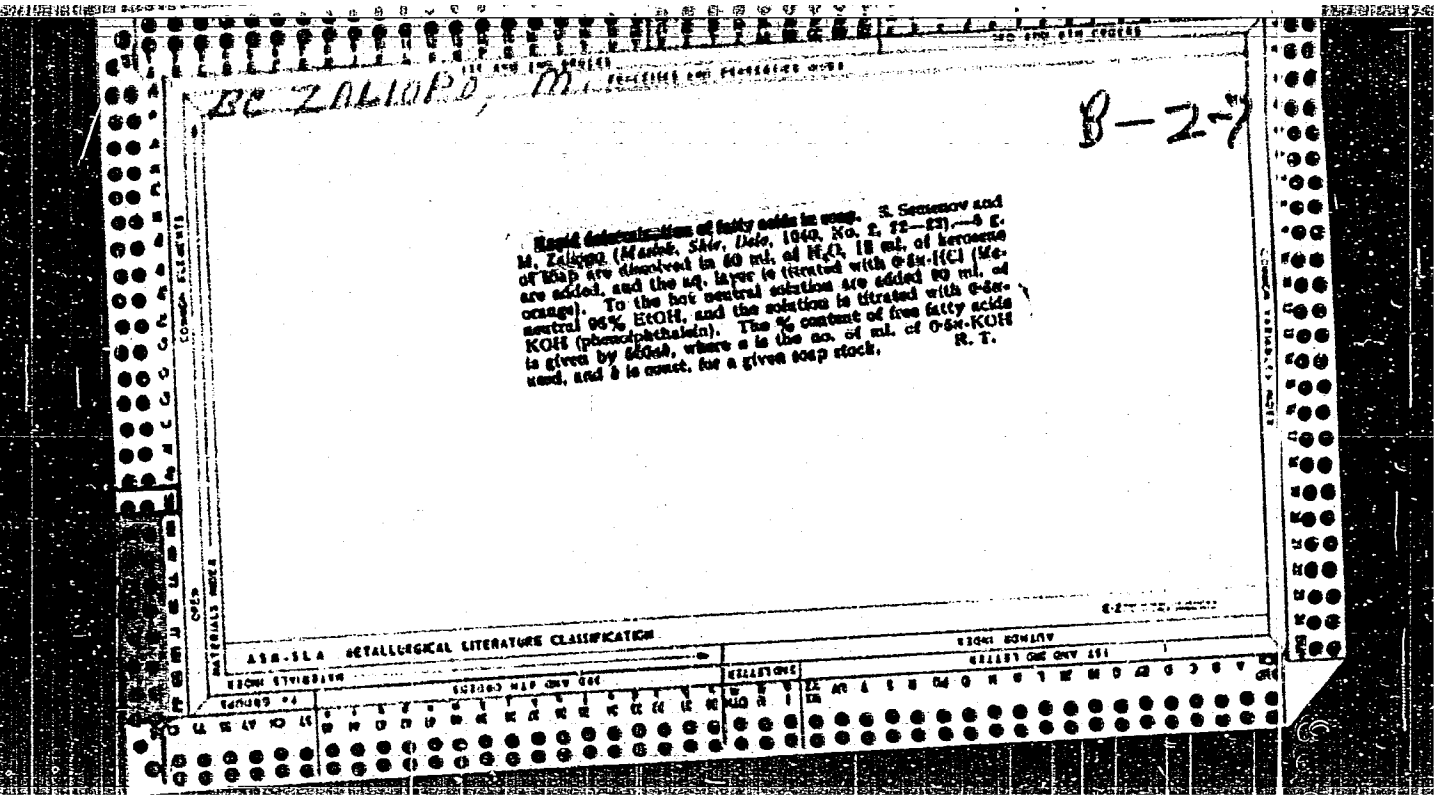


Elimination of scale formation in (glycerol) concentration. M. Zalkopo. *Maslobaino Zhirovoe Delo* 11, 29(1935).—Expts. in the concn. of glycerol solns. showed that on the addn. of graphite (0.085%) based on the wt. of evapd. water the scale formation on the pipes is eliminated. The coarse-grained aggregates of the salts formed are deposited at the bottom of the evaporator and are easily removed and sepd. from the glycerol. By this method the time required for evapn. is reduced 50%. The org. and inorg. residues in the crude glycerols obtained by evapn. with and without the addn. of graphite are 4.0 and 5.25%, resp.

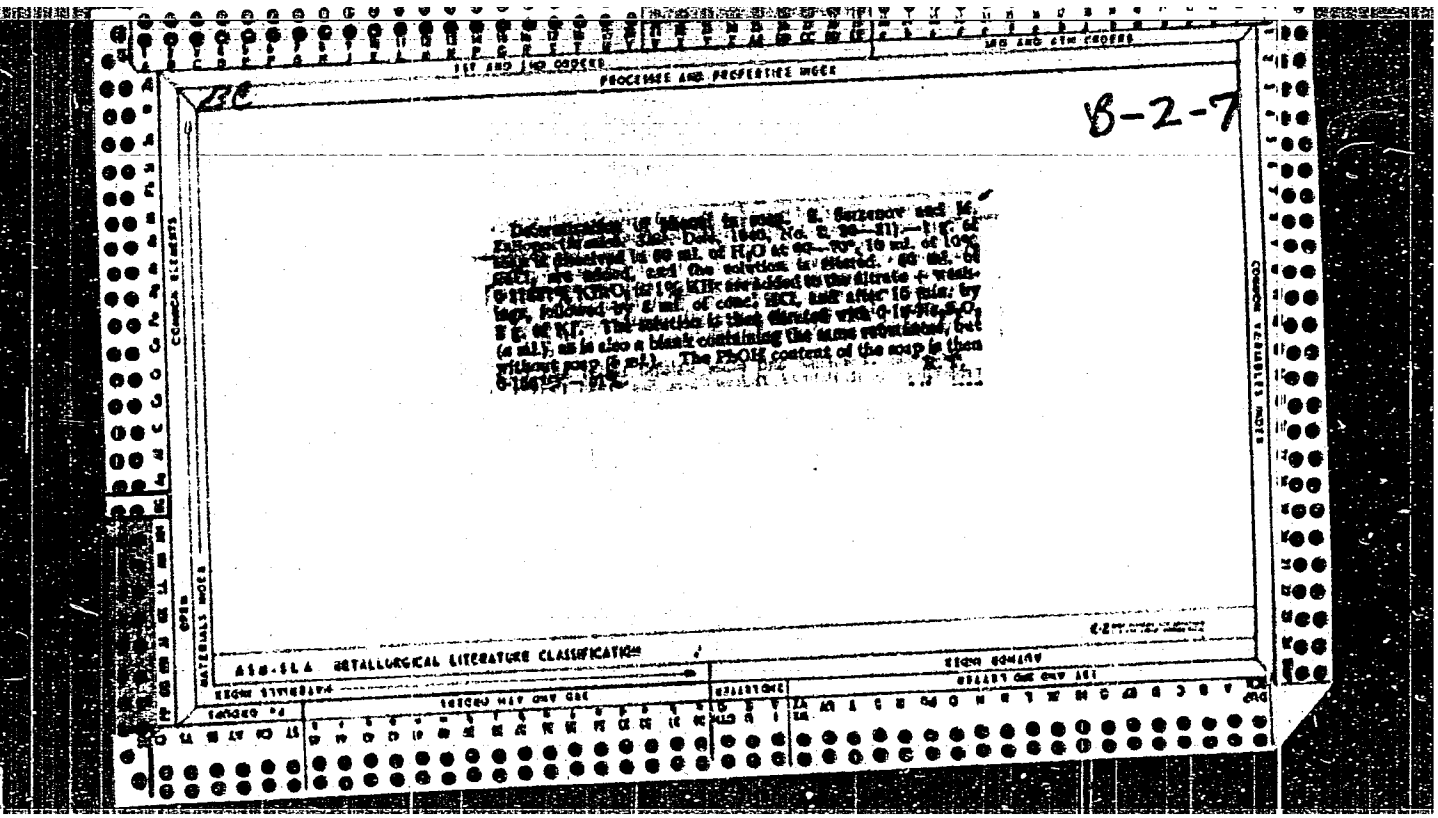
Chas. Blanc

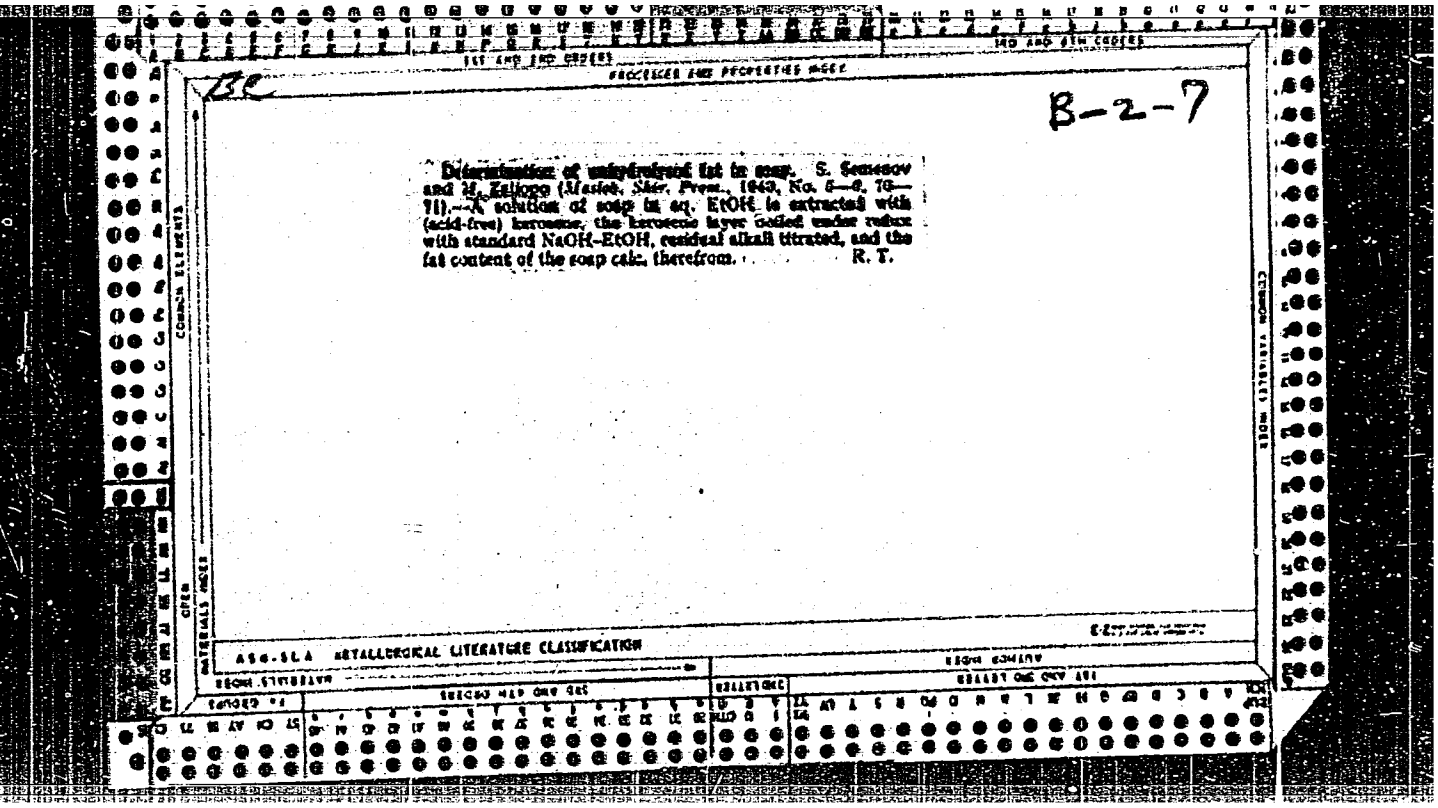


Calculation of glycerin yields in the making of soap from neutral oils. M. Zalopo. *Maslobolno Zhirovoe Delo* 11, 605-7(1936).—A discussion with math. treatment is based on the work of Tyutyunnikov (*Moyushchie sredstva* 1(1933)); cf. C. A. 28, [illegible]. Chas. Blanc



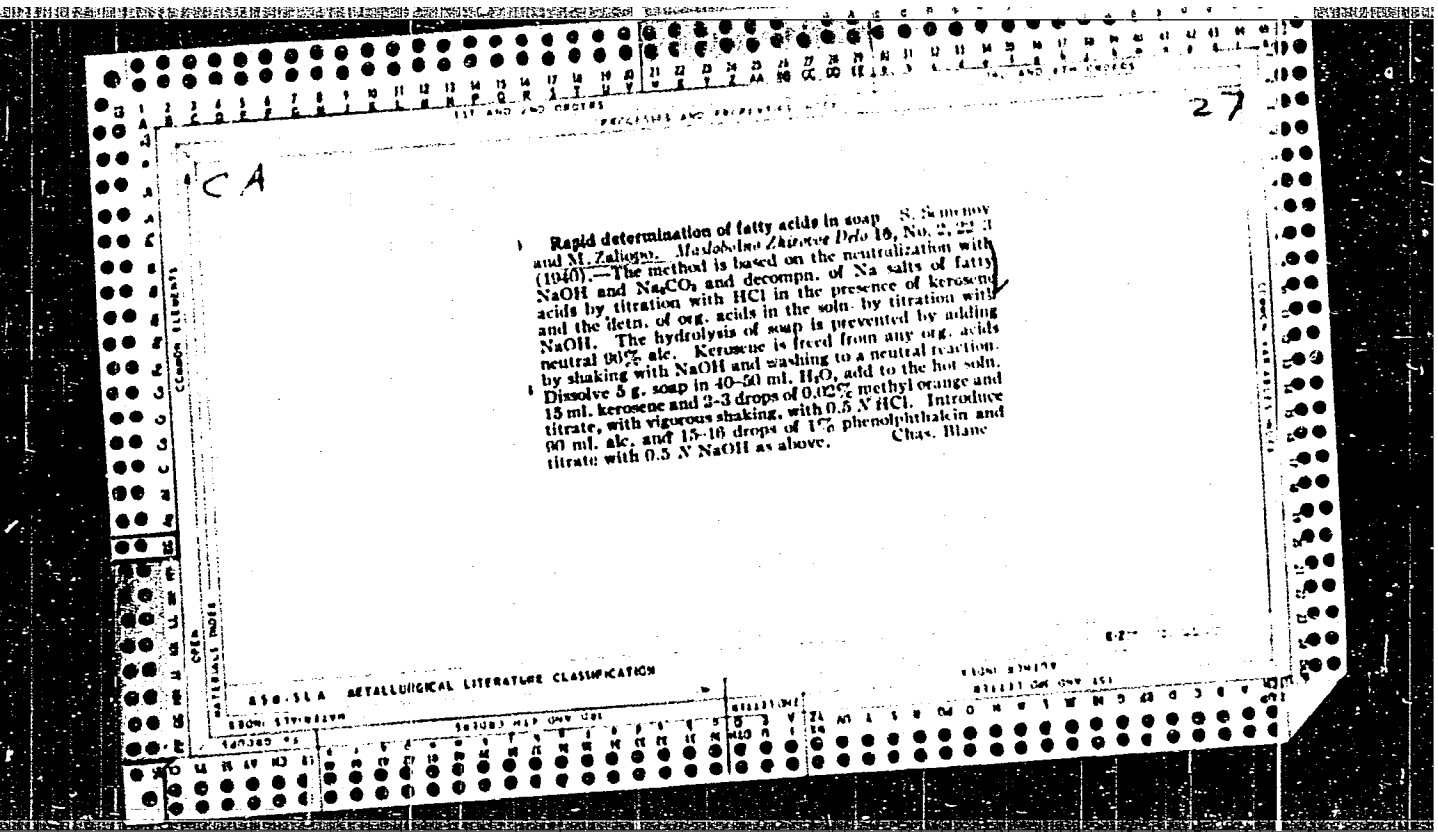
Rapid determinations of fatty acids in soap. S. Semenov and M. Zaloga (*Maslob. Shir. Dela*, 1940, No. 2, 12—13).—5 g. of soap are dissolved in 50 ml. of H_2O, 15 ml. of kerosene are added, and the aq. layer is titrated with 0·5*N*-HCl (Me-orange). To the hot neutral solution are added 90 ml. of neutral 96% EtOH, and the solution is titrated with 0·5*N*-KOH (phenolphthalein). The % content of free fatty acids is given by $56(a-b)$, where a is the no. of ml. of 0·5*N*-KOH used, and b is const. for a given soap stock. R. T.





B-2-7

Determination of unhydrolyzed fat in soap. S. Semenov and M. Zaliopp (*Maslob. Shir. Prom.*, 1943, No. 5—6, 10—11).—A solution of soap in aq. EtOH is extracted with (acid-free) kerosene, the kerosene layer boiled under reflux with standard NaOH–EtOH, residual alkali titrated, and the fat content of the soap calc. therefrom. R. T.



CA

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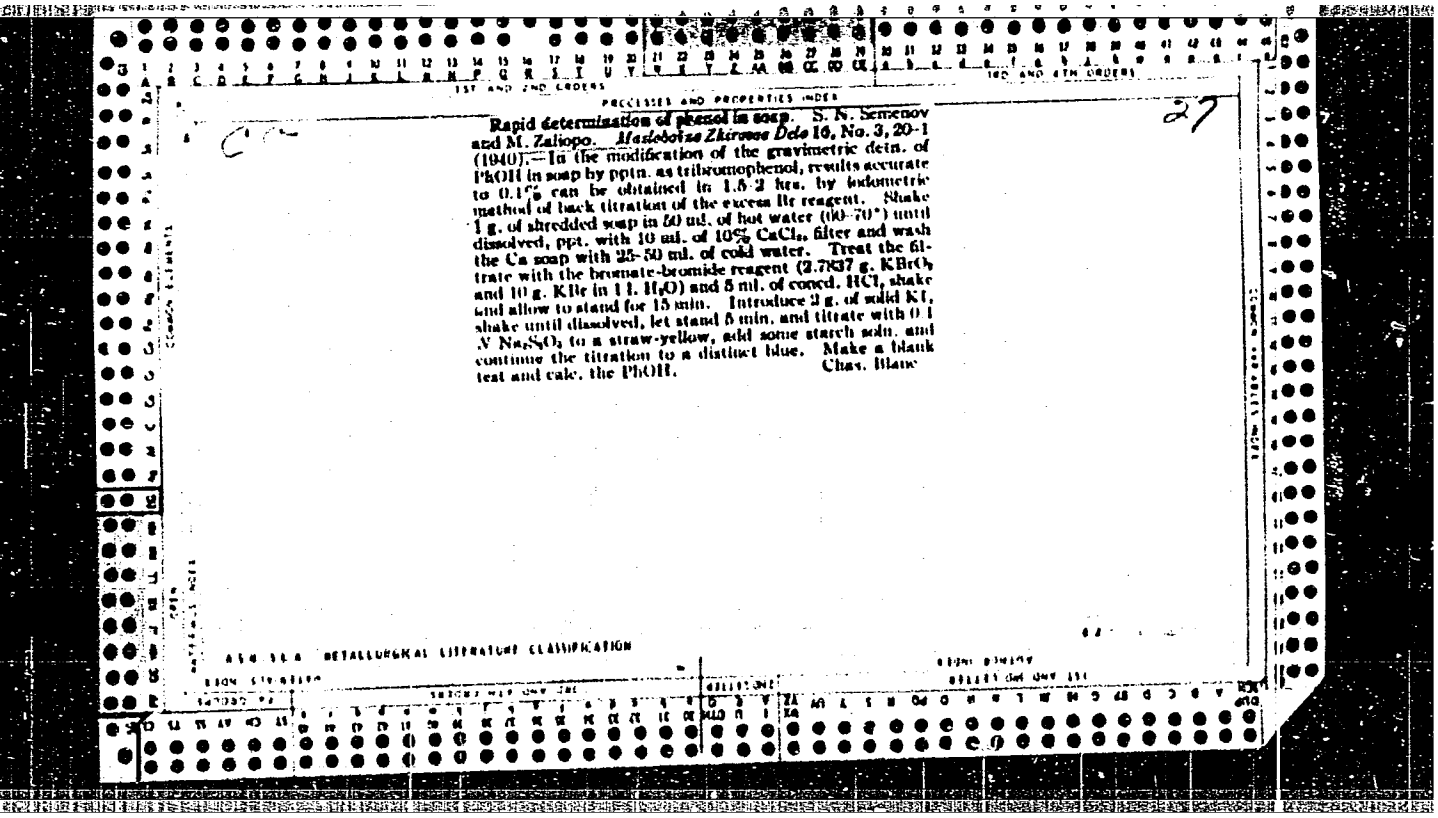
Rapid determination of fatty acids in soap. S. Semenov and M. Zaliogin. *Maslobino Zhirovoe Delo* 16, No. 2, 22-3 (1940).—The method is based on the neutralization with NaOH and Na_2CO_3 and decompn. of Na salts of fatty acids by titration with HCl in the presence of kerosene and the detn. of org. acids in the soln. by titration with NaOH. The hydrolysis of soap is prevented by adding neutral 90% alc. Kerosene is freed from any org. acids by shaking with NaOH and washing to a neutral reaction. Dissolve 5 g. soap in 40–50 ml. H_2O, add to the hot soln. 15 ml. kerosene and 2–3 drops of 0.02% methyl orange and titrate, with vigorous shaking, with 0.5 *N* HCl. Introduce 90 ml. alc. and 15–16 drops of 1% phenolphthalein and titrate with 0.5 *N* NaOH as above. Chas. Blanc



PROCESSES AND PROPERTIES INDEX

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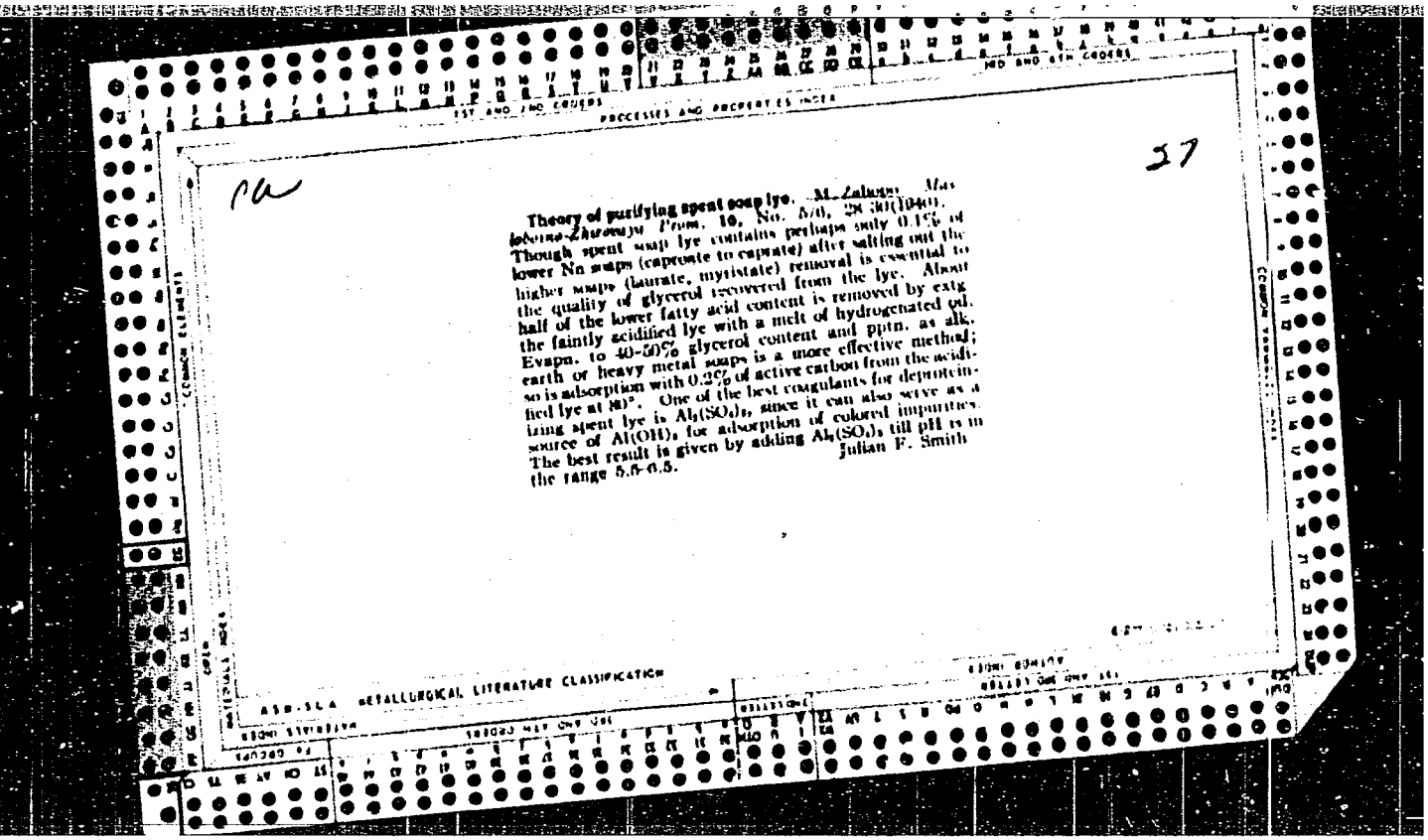
Rapid determination of phenol in soap. S. N. Semenov and M. Zaliopo. *Maslobolno Zhirovoe Delo* 16, No. 3, 20–1 (1940).—In the modification of the gravimetric detn. of PhOH in soap by pptn. as tribromophenol, results accurate to 0.1% can be obtained in 1.5–2 hrs. by iodometric method of back titration of the excess Br reagent. Shake 1 g. of shredded soap in 50 ml. of hot water (60–70°) until dissolved, ppt. with 10 ml. of 10% $CaCl_2$, filter and wash the Ca soap with 25–50 ml. of cold water. Treat the filtrate with the bromate-bromide reagent (2.7837 g. $KBrO_3$ and 10 g. KBr in 1 l. H_2O) and 5 ml. of concd. HCl, shake and allow to stand for 15 min. Introduce 2 g. of solid KI, shake until dissolved, let stand 5 min. and titrate with 0.1 *N* $Na_2S_2O_3$ to a straw-yellow, add some starch soln. and continue the titration to a distinct blue. Make a blank test and calc. the PhOH.

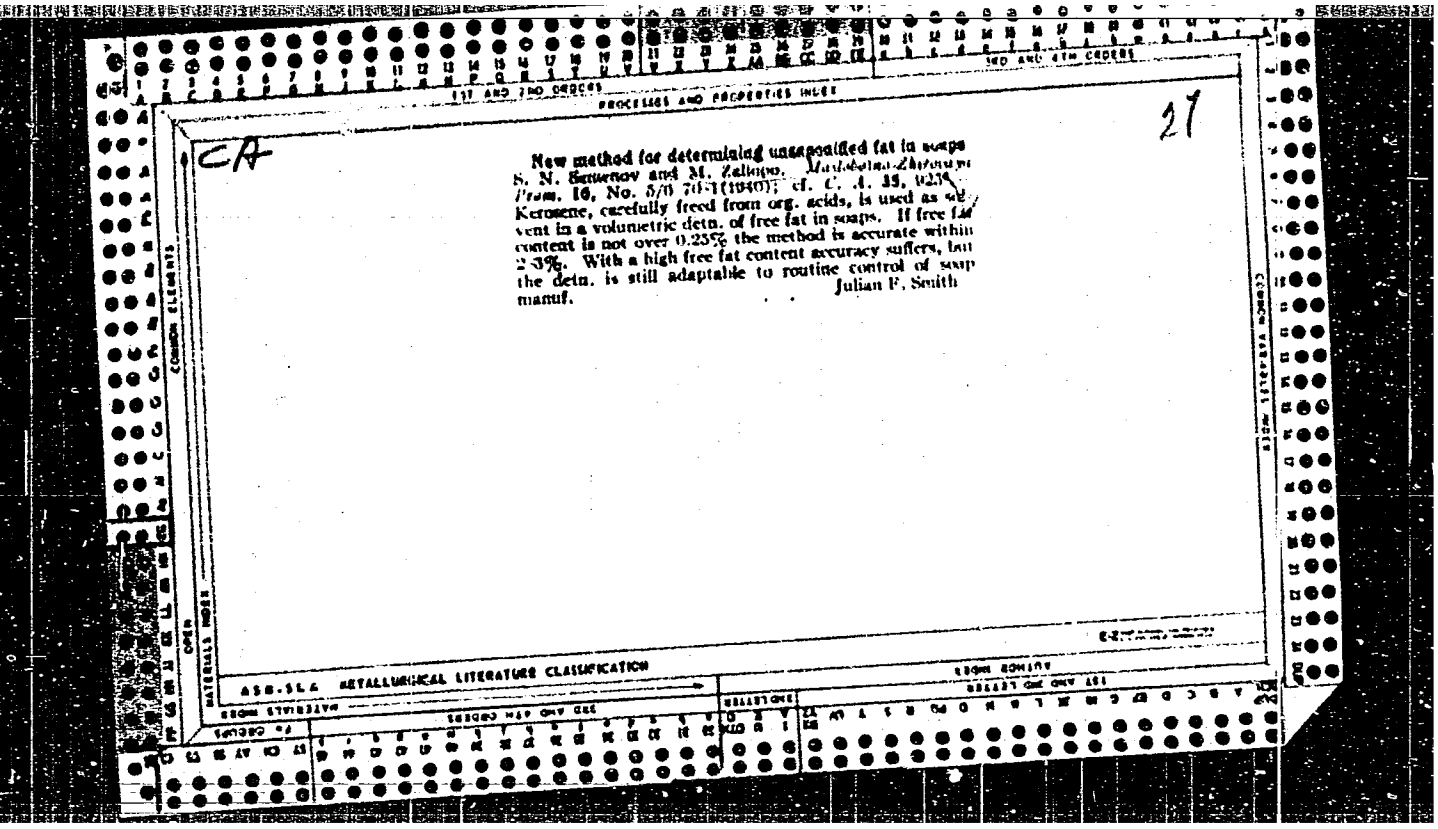
Chas. Blanc

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION



Theory of purifying spent soap lye. M. Zaharov. Mas
lobeino-Zhirovaya Prom. 10, No. 8/9, 28-30(1944).
Though spent soap lye contains perhaps only 0.1% of
lower Na soaps (caprate to caprate) after salting out the
higher soaps (laurate, myristate) removal is essential to
the quality of glycerol recovered from the lye. About
half of the lower fatty acid content is removed by extg.
the faintly acidified lye with a melt of hydrogenated oil.
Evapn. to 40-50% glycerol content and pptn. as alk.
earth or heavy metal soaps is a more effective method;
so is adsorption with 0.2% of active carbon from the acidi-
fied lye at 80°. One of the best coagulants for deprotein-
izing spent lye is $Al_2(SO_4)_3$, since it can also serve as a
source of $Al(OH)_3$ for adsorption of colored impurities.
The best result is given by adding $Al_2(SO_4)_3$ till pH is in
the range 5.6-6.5.

Julian F. Smith



CA

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New method for determining unsaponified fat in soaps. S. N. Semenov and M. Zaliapo. *Maslobeino-Zhirovoye Prom.* 16, No. 5/6 7[8-1](1940); cf. *C. A.* 35, 9236. Kerosene, carefully freed from org. acids, is used as solvent in a volumetric detn. of free fat in soaps. If free fat content is not over 0.25% the method is accurate within 2-3%. With a high free fat content accuracy suffers, but the detn. is still adaptable to routine control of soap manuf. Julian F. Smith

ZALIOPO, M. N.

Soap for sea water. M. N. Zaliopo, L. M. Baranov, and G. A. Borodina. *Maslobno-Zhirovoi Prom.* 19, No. 2, 16–18(1954).—Manuf. of soap from coconut oil (I) with good phys. and sea water laundering qualities is described. One half (4.4–5 tons) part of the I charge is run into the pan, and 40% soln. of NaOH is added until about 10% excess of alkali necessary to saponify I is present. An addnl. 2 tons of I is run into the same pan and sapond. The resulting paste (II) is treated with 20% soln. of NaCl at the rate of 1% of salt based on the wt. of II. The last 2 tons of I is then added to II, and the above process is repeated. At this stage the soap paste (III) should contain fatty acids 42–45, free NaOH 1–1.4, and NaCl 1–1.2%. On leaving the pan III is cooled with water at 11° prior to drying. Drying is by mech. passage through a continuous drier with air-intake temp. at 90° and the exhaust at 50–52°. The soap shavings, contg. fatty acids 63–65 and free alkali 1.5–1.9% are mixed first with synthetic fatty acids (C_{12}–C_{16}) to improve the plasticity of the finished product and to reduce its alkali content to 0.2% of the wt. of acids, perfumed, and then compressed into a bar prior to cutting, moistening with glycerol, stamping, and packaging. The authors claim that this soap was used successfully in the maritime provinces for washing purposes. V. N. K.

ZALIOPO, M.N.; BARANOV, L.M.; BORODINA, G.A.

Use of synthesic fatty acids in the production of toilet soap.
Masl.-zhir.prom. 19 no.6:17-21 '54. (MLRA 7:10)
(Soap) (Acids, Fatty)

ZALIOPO, M.N.

Soap for sea and hard water. M. N. Zaliopo and L. M. Basanov. *Maslobeino-Zhirovaya Prom.* 21, No. 1, 18-19 (1956).—The sea-water laundering qualities of the previously described soap (*C.A.* 48, 8563*e*) were made optimum by a compn. of 80% hydrogenated sperm-whale oil, 5% rosin, and 15% coconut oil, completely sapond. with 40% NaOH. At this stage the paste should contain fatty acids 48–50 and free NaOH 1.5%. This is followed by graining with 40% soln. of NaOH and settling for 2 hrs. The settled soap is dild. with saline water, grained a 2nd time, settled for 24 hrs., cooled, dried, etc. The finished product should contain fatty acids 80–83, free alkali 0.1–0.2, and salt 0.4–0.7%.

Vladimir N. Krukovsky

(2)

ZALIOPO, M.N., inzh.

Method of determining sodium and potash soaps in mixtures of the two. Masl.-zhir.prom. 23 no.9:27-29 '57. (MIRA 10:12)

1.Fabrika "Svoboda."

(Soap--Analysis)

ZALIOPO, M.N., inzh.; SHAROV, I.I., inzh.

Preparation of toilet soap from fats split without the aid of a catalyst. Masl.-zhir. prom. 24 no. 6:17-19 '58. (MIRA 11:7)

1. Fabrika "Svoboda" (for Zaliopo). 2. Upravleniye meditsinskoy i parfyumernoy promyshlennosti Mosgorsovnarkhoza (for Sharov).
(Soap)

VOZNESENSKAYA, G.A., kand.med.nauk; BOZIYAN, Kh.A., vrach (Stepanakert); SILUYANOVA, V.A., kand.med.nauk; GRIGOROVSKIY, I.M., prof.; KUNDIYEV, Yu.I., kand.med.nauk (Kiyev); MARSHAK, M.S., prof.; ZALIOFO, M.N.; DONETSKAYA, L.M.; ORGANOVA, M.G.

Health hints. Zdorov'e 9 no.3:30-31 Mr '63. (MIRA 16:5)
(HYGIENE)

GETMANSKIY, I.K., inzh.; PANCHENKO, A.P.; ZALIOPO, M.N., inzh.; DONETSKAYA, L.M.

Liquid shampoo made from purified alkyl sulfates of secondary synthetic alcohols. Masl.-zhir. prom. 27 no.9:17-18 S '61. (MIRA 14:11)

1. Nauchno-issledovatel'skiy institut sinteticheskikh zhirozameniteley i moyushchikh sredstv (for Getmanskiy, Panchenko). 2. Fabrika "Svoboda" (for Zaliopo, Donetskaya).

(Shampoo)

ROZHDESTVENSKIY, D.A.; ZALIOPO, M.N.; BORODINA, G.A.

Phase transitions in soap and their quantitative analysis. Koll. zhur. 22 no.4:458-463 Jl-Ag '60. (MIRA 13:9)

1. Institut narodnogo khozyaystva im. G.V.Plekhanova i Fabrika "Svoboda", Moskva.

(Soap)

ZALIOPO, M.N., inzh.

Use of sodium s licate in the manufacture of toilet soap. Masl.-zhir.prom. 26 no.10:40-42 O '60. (MIRA 13:10)

1. Moskovskaya fabrika "Svoboda."
(Soap) (Sodium silicate)

ROZHDESTVENSKIY, D.A., kand.tekhn.nauk; ZALIOPO, M.N., inzh.; BORODINA, G.A., inzh.

Phase changes in soap and their quantitative determination. Masl.-zhir.prom. 25 no.9:24-28 '59. (MIRA 12:12)

1. Institut narodnogo khozyaystva im. G.V.Plekhanova (for Rozhdestvenskiy). 2. Moskovskaya fabrika "Svoboda" (for Zaliopo, Borodina)
(Soap)

PERSHIN, G.N., prof.; KRAFT, M.Ya., prof.; ROZENTUL, M.A., prof.; POZHARSKAYA, A.M., starshiy nauchnyy sotrudnik; MILOVANOVA, S.N., starshiy nauchnyy sotrudnik; BORODINA, G.M., starshiy nauchnyy sotrudnik; MASLOV, P.Ye., starshiy nauchnyy sotrudnik; IVANOVSKAYA, Ye.A., mladshiy nauchnyy sotrudnik; ARONSON, P.Yu., mladshiy nauchnyy sotrudnik; KANCHUKH, Sh.F.; SHEYER, A.A.; ZALIOPO, M.P., spetsialist po moyushchim sredstvam

Treatment of your hair with selenium sulfide soap. Izobr. i rats. no.12:32-33 '63. (MIRA 17:2)

1. Zaveduyushchiy laboratoriyey khimioterapii infektsionnykh zabolevaniy Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta im. Ordzhonikidze (for Pershin). 2. Zaveduyushchiy laboratoriyey metalloorganicheskikh soyedineniy Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta im. Ordzhonikidze (for Kraft). 3. Zaveduyushchiy otdelom TSentral'nogo kozhno-venerologicheskogo instituta (for Rozentul). 4. Zaveduyushchiy laboratoriyey lekarstvennykh form Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta im. Ordzhonikidze (for Pozharskaya). 5. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im. Ordzhonikidze (for Milovanova, Borodina, Ivanovskaya, Aronson). 6. Tsentral'nyy kozhno-venerologicheskiy institut (for Maslov).

AUTHOR: Zalipayev, I. B.

TITLE: Rapid Cooling of Ceramic Pipes in Furnaces (Skorostnoye okhlazhdeniye keramicheskikh trub v gornakh)

PERIODICAL: Steklo i Keramika, 1957, Vol. 14, No. 1, pp. 25-26 (U.S.S.R.)

ABSTRACT: A new method was adopted at the Doroginsk Ceramic Pipe Factory (Doroginskiy keramiko-trubnyy zavod) which permits rapid cooling of ceramic pipes in furnaces within 27 - 30 hours, and reduces the pipe flows from 6 to 1%. After firing, all furnace doors and shutters are sealed with clay solution. The cooling air is introduced under the furnace roof arch (Fig. 1) and the pipes are gradually cooled according to the curve in Fig. 2. At the furnace temperatures of 580 - 600°, the cooling air flow is reversed (Fig. 3), that is, it enters the furnace through the hearth. At the furnace temperatures of 180 - 200°, a water spraying unit is introduced into the furnace shaft and the water is sprayed two hours later. The rate of cooling pipes at an even cooling air flow throughout the furnace can be attained at about the same rate as furnace heating.

Card 1/2

ZAGORODNOV, A.M.; ZALIPUKHIN, M.I.

Tectonic pattern of the Pur-Taz-Yenisey interfluve. Trudy SNIIGGIMS no.10:23-40 '60. (MIRA 15:12)
(West Siberian Plain--Geology, Structural)

ZALIS, A.I., kand. sel'skokhoz. nauk (Litovskaya SSR)

Distribution of the industries and development of nitrogen fertilizer assortment in the northwestern region of the U.S.S.R. Trudy LIEI no.37:70-72 '61. (MIRA 13:4)

ZALIS, A.I., kand. sel'skokhoz. nauk; MEKLENBURGAS, A.M., kand.sel'skokhoz. nauk; LAUSKIS, S.K.

Using peat in agriculture in the Lithuanian S.S.R. Zemledelie 25 no.7: 72-77 Jl '63. (MIRA 16:9)

1. Litovskiy nauchno-issledovatel'skiy institut zemledeliya.
(Lithuania--Field crops-- Fertilizers and manures)
(Lithuania--Peat)

ZALIS, S.A.

AUTHOR: Sadovnichenko, A.I., Engineer SOV/117-58-11-34/36

TITLE: The Day of the Innovator (Den' novatora)

PERIODICAL: Mashinostroitel', 1958, Nr 11, pp 44 - 45 (USSR)

ABSTRACT: At the Nevskiy mashinostroitel'nyy zavod imeni V.I. Lenina (Neva Machine Building Plant imeni V.I. Lenin) a "Day of the Innovator" was organized on June 18, 1958, by the Komitet po metallizatsii Leningradskogo otdeleniya NTO Mashproma (Committee for Metallization, of the Leningrad Branch of NTO Mashprom). The leading engineer of the plant laboratory, S.A. Zalis, read a paper on the use of metallization in the Leningrad plants. The assistant of the chief engineer of the plant, A.V. Petukhov, spoke on the development of metallization in the plant. Metallization has shown good results in the repair of worn machine parts.

1. Flame spraying---USSR [redacted]

Card 1/1

ZALIS, S.A.

ZALIS, S.A., inzh.

Advanced technology. Mashinostroitel' no.1:46-47 Ja '58. (MIRA 11:1)
(Technology)

AUTHOR: Zalis, S.A., Engineer SOV/122-58-5-18/26

TITLE: The Aluminizing of Welded Components of Large Bulk (Alitirovaniye krupnogabaritnykh svarnykh detaley)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Nr 5, pp 69 - 70 (USSR)

ABSTRACT: The saturation of the surface layer of steel with aluminium by a furnace diffusion process increases the resistance to scaling. The combination of temperature, time and size creates difficulties in large welded components, subject to deformations when heated. Some workshop practices developed at the Nevskiy mashinostroitel'nyy zavod (Nevskiy Engineering Plant) imeni Lenin are described, applied to the welded housings of induced draught fans. The procedures concern the prevention of deformation by applying constraints, the shortening of the time between cleaning by sand-blasting and the metallizing with aluminium, the coating with a protective paste (48% silver graphite, 20% fireclay, 30% quartz sand and 2% ammonia chloride) dissolved in waterglass (about 100% of the dry constituents), and the diffusion treatment. The treatment recommended consists of placing the component in the furnace, heated to 250 °C and holding for

Card 1/2

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30 minutes, heating at the rate of 45 °C per hour up to 550 °C, holding for 35 minutes, heating at the rate of 70 °C per hour to 960 °C, holding for 3 3/4 hours and finally cooling in the furnace to 300 °C. The success of a similar treatment applied to gas turbine blades is mentioned.

1. Metals--Scale 2. Aluminum--Applications

Card 2/2

ZALKIN, V.M.

Dimensional correspondence in orientation crystallization.
Zhur. fiz. khim. 38 no.10:2524-2527 O '64.
(MIRA 18:2)

GURDZHI, A.Ya.; ZALIS, V.M.; GOLOVIN, A.I.

Method of the continuous scrubbing of the nitration products of methyl ether of 4-tert-butyl-m-cresol in the production of musk ambrette. Trudy VNIISNDV no.6:156-158 '63. (MIRA 17:4)

ZALIS-ZALANSKAS, A. I. Doc Cand Agr Sci -- (diss) "The role of various peat fertilizers in ~~the~~ raising the fertility of ~~the~~ light soils and the ~~productivity~~ yield of crops cultivated on these soils ~~in the~~ under conditions of the Eastern zone of Lithuania" Kaunas, 1957. 20 pp 20 cm. (Min of Agriculture USSR. Lithuanian Agricultural Academy), 100 copies

(KL, 21-57, 104)

SOV/124-58-10-11045
Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 10, p 48 (USSR)

AUTHOR: Zalishauskas, M.

TITLE: The Application of Turbulent Rarefaction to the Theory of Jet Devices (Primeneniye turbulentnogo razrezheniya v teorii struynykh apparatov)

PERIODICAL: Tr. Kaunassk. politekhn. in-ta, 1957, Vol 5, pp 47-58

ABSTRACT: In analyzing the causes of the differences between the theoretical calculation of an ejector pump and the results of experiments, the author arrives at the conclusion that the initial equation of ejection is erroneous and adds to it a term which takes into account the so-called "turbulent rarefaction". Results of experiments are presented which, in the author's opinion, confirm the hypothesis intrcduced by him. The mixing of the fluid from the surrounding medium with the jet actually occurs in conditions of a positive pressure differential between the ejected medium and the working jet, but this differential is small (it constitutes ~0.1% of the dynamic pressure of the flow) and taking it into account in the ejection equation will, therefore, hardly have a significant effect upon the result. The

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author's conclusion regarding the confirmation of his calculations by the results of experiments needs verification and is evidently explained by inaccuracy in the experiments.

G. N. Abramovich

ZALISHAUSKAS, M. P. Cand Tech Sci -- (diss) "Study of Turbulent Rarefaction ~~in Relation~~ to ~~the~~ the Theory of Jet Apparata." Minsk, 1957. 13 pp 22 cm. (Min of Higher Education USSR, Belorussian Polytechnic Inst im I. V. Stalin), 100 copies (KL, 25-57, 113)